Attorney Docket # 5292-10PCON Patent

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of
Jukka YLI-KORHONEN et al.
Serial No.: 10/679,213
Filed: October 3, 2003
For: Method of Generating Charging Data in a Data Network, and a Data Network

Examiner: CHEA, Philip J.
Group Art: 2153

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SUPPLEMENTAL APPEAL BRIEF

SIR:

This supplemental appeal brief is filed in response to the Notification of Non-Compliant Appeal Brief mailed on September 25, 2008 and supersedes the Appeal Brief filed on September 12, 2008.

This is an appeal, pursuant to 37 C.F.R. § 41.37 from the decision of the Examiner in the above-identified application, as set forth in the Final Office Action dated December 12, 2007, wherein the Examiner finally rejected appellants' claims, and the Advisory Action dated June 24, 2008. The rejected claims are reproduced in Appendix A attached hereto. A Notice of Appeal was filed on June 12, 2008.

The fee of $510.00 for filing an Appeal Brief pursuant to 37 C.F.R. § 41.20 was submitted with the Appeal Brief filed on September 12, 2008. Any additional fees or charges in connection with this application may be charged to our Patent and Trademark Office Deposit Account No. 03-2412.

REAL PARTY IN INTEREST

The assignee, TeliaSonera Finland Oyj, of applicants, Jukka YLI-KORHONEN, Ari JUNTUNEN, and Kimmo KEINANEN, is the real party of interest in the above-identified U.S. Patent Application.

RELATED APPEALS AND INTERFERENCES

There are no other appeals and/or interferences related to the above-identified application at the present time.

STATUS OF CLAIMS

Claims 1-56 are pending in this application. Claims 1-56 have been rejected. Claims 1-56 are on appeal.

STATUS OF AMENDMENTS

A response to the final Office Action, which did not amend the claims, was filed on March 12, 2008. In response, on June 24, 2008, the Examiner issued an Advisory Action indicating that the response would be entered for purposes of appeal.

SUMMARY OF THE CLAIMED SUBJECT MATTER

Independent claim 1 of Appellants' application is directed to a method of generating charging data in a data network. References are made to the application as originally filed. The claimed method comprises:

transmitting data generated by a content provider in a content server to a node of a data transmission connection used by a connection provider (step 302; page 12, lines 3-5; and Fig. 3);

transmitting the data generated by the content provider from the node through the data transmission connection used by the connection provider to a subscriber terminal (step 304; page 12, lines 5-6; and Fig. 3);

identifying in the node individual transactions in the data to be transmitted to the subscriber terminal (step 306; page 12, lines 7-10; and Fig. 3);

transmitting identification information of the identified transactions from the node to a charging information system of the connection provider (step 308; page 12, lines 10-12; and Fig. 3);

identifying in the charging information system transactions in a chargeable service entity based on the identification information of the identified transactions (step 310; page 12, lines 13-20; and Fig. 3);

generating in the charging information system one content ticket for the chargeable service entity using the transactions in the chargeable service entity (step 312; page 12, lines 20-25; and Fig. 3), and

using the content ticket in billing for the chargeable service entity, whereby a subscriber associated with the subscriber terminal is billed only once for the accumulated charges of all the transactions in the chargeable service entity (step 314; page 12, lines 21-26; and Fig. 3).

Independent claim 29 of the present application is directed to data network comprising:

a content server (108) of a content provider (see page 8, line 11; and Fig. 1);

a node (104) of a data transmission connection used by a connection provider, the content server (108) being connected to the node (104) through the Internet (106), the node (104) being connected, by a connection through a data transmission connection used by the connection provider, to a subscriber terminal (100) (see page 8, lines 7-12; and Fig. 1);

a charging information system (110) connected to the node (104) (see page 9, lines 15-16; and Figs. 1-2), the node (104) comprises means for identifying individual transactions (144) in data to be transmitted to the subscriber terminal (see page 8, lines 15-18; and Fig. 1);

means for identifying transactions of a chargeable service entity (146) in the charging information system based on identification information of the individual transactions (see page 9, lines 23-28; and Fig. 1);

means for generating in the charging information system one content ticket (146) for the chargeable service entity using the transactions in the changeable service entity (see page 9, lines 24-28; and Fig. 1), and

means for using the one content ticket (148) in billing for the chargeable service entity, whereby a subscriber associated with the subscriber terminal is billed only once for the accumulated charges of all the transactions in the chargeable service entity (see page 11, lines 24-33; and Fig. 1).

The structure of the means 144, 146, and 148 recited in independent claim 29 is described at page 8, lines 24-31 and page 9, lines 25-28.

GROUNDS OF REJECTION TO BE REVIEWED IN APPEAL

1. Whether claims 1, 6-10, 12-14, 22-23, 29, 34-38, 40-42, and 50-51 are patentable under 35 U.S.C. §103 over U.S. Patent Application Publication No. 2002/0046406 (Chelehmal) in view of U.S. Patent No. 6,289,314 (Matsuzaki)?

2. Whether claims 2, 4, 30 and 32 are patentable over Chelemal and Matsuzaki and further in view of U.S. Patent Application Publication No. 2002/0049841 (Johnson).

3. Whether claims 3 and 31 are patentable over Chelemal and Matsuzaki and further in view of U.S. Patent No. 7,069,234 (Cornelius).

4. Whether claims 5 and 33 are patentable over Chelemal and Matsuzaki and further in view of U.S. Patent No. 6,973,499 (Peden).

5. Whether claims 15-17 and 43-45 are patentable over Chelemal and Matsuzaki and further in view of U.S. Patent No. 7,082,466 (Steegmans).

6. Whether claims 18 and 46 are patentable over Chelemal and Matsuzaki and further in view of U.S. Patent No. 6,249,869 (Drupsteen).

7. Whether claims 11, 19-20, 39, and 47-48 are patentable over Chelemal and Matsuzaki and further in view of U.S. Patent No. 6,532,493 (Aviani).

8. Whether claims 21 and 49 are patentable over Chelemal and Matsuzaki and further in view of U.S. Patent No. 6,189,146 (Misra).

9. Whether claims 24, 25, 52, and 53 are patentable over Chelemal and Matsuzaki and further in view of U.S. Patent Application Publication No. 2002/0055847 (Nakano).

10. Whether claims 26, 28, 54, and 56 are patentable over Chelemal and Matsuzaki and further in view of U.S. Patent No. 5,944,824 (He).

11. Whether claims 27 and 55 are patentable over Chelemal and Matsuzaki and further in view of U.S. Patent No. 6,226,498 (Tschorn).

ARGUMENT

1. Rejection of claims 1, 6-10, 12-14, 22-23, 29, 34-38, 40-42, and 50-51

Independent claim 1 specifically recites the steps of "transmitting data generated by a content provider in a content server to a node of a data transmission connection used by a connection provider", "identifying in the node individual transactions in the data to be transmitted to the subscriber terminal", "transmitting identification information of the identified transactions from the node to a charging information system of the connection provider", "identifying in the charging information system transactions in a chargeable service entity based on the identification information of the identified transactions", "generating in the charging information system one content ticket for the chargeable service entity using the transactions in the chargeable service entity", and "using the content ticket in billing for the chargeable service entity, whereby a subscriber associated with the subscriber terminal is billed only once for the accumulated charges of all the transactions in the chargeable service entity".

Chelehmal fails to disclose the above-recited limitations. Chelehmal discloses a system for allowing on-demand delivery of data, such as video data, to a subscriber from a content server. According to Chelehmal, a set top box 12 which is connected to a television/monitor 14 receives MPEG-2 transport data streams via a cable 10 (see paragraph [0017] of Chelehmal). Content servers 60, 62, 64 are connected to a managed IP network 66 to send data packets to a translator 68 at a cable system provider 21 (see the last sentence of paragraph [0023]). The translator 68 translates the packets to an MPEG-2 program stream (see paragraph [0026], lines 11-14). The Internet Service Provider 78, which directly connects the set top boxes 12 to the IP network 66, allows the users to access a listing of the available movies directly (see paragraph [0033] lines 1-3 and 13-14). Chelehmal expressly states that billing systems used in conjunction with the set top box can also be used in a similar fashion with the present invention (see last sentence of paragraph [0017]). Other references to billing processes in Chelehmal refer only to those practices that are currently in place (see paragraphs [0020], [0027], and [0037]). These brief descriptions of the billing systems in Chelehmal fail to disclose applicant's claimed recitations.

Regarding the specific rejections, the Examiner states that the step of "identifying in the node individual transactions in the data to be transmitted to the subscriber terminal" is disclosed at paragraph [0007], lines 1-3 of Chelehmal. However, this Examiner-referenced section of the reference merely states that Chelehmal discloses a method of using a managed network and a video cable system to deliver video data on-demand from a content provider to a cable system user. It does not specifically disclose identifying individual transactions in the data to be transmitted to the subscriber terminal. Chelehmal identifies data only from the user request (see paragraph [0037] of Chelehmal).

In the Advisory Action, the Examiner alleges that individual transactions are identified to deliver the requested video on-demand. However, paragraphs [0028] – [0030] describe how the data is transported. There is no indication that a transaction is identified in each piece of data. In fact, there is no need to include this information. Billing for video data on-demand of Chelehmal is not based on connection time. Accordingly, there is no need to identify the associated transaction of each piece of data. In contrast, the present invention identifies the transaction of the data to be transmitted because the transmission of data is associated with a cost for connection time to deliver the data. Accordingly, Chelemal fails to disclose, teach or suggest the step of "identifying in the node individual transactions in the data to be transmitted to the subscriber terminal", as recited in independent claim 1.

The Examiner further alleges that the step of "transmitting identification information of the identified transactions from the node to a charging information system of the connection provider" is disclosed at paragraph [0037], lines 8-11 of Chelehmal. That Examiner-referenced paragraph of Chelehmal merely states that a request by a subscriber to a content server "may indicate the time at which the data is requested and indicates the ID number of the set top box 50", and that the "content server 60 then sends a signal to the set top box 50 through the same path in reverse confirming the request, indicating the time the information will be sent, the charges that will be billed to the subscriber 42 and the channel on which the data will be sent to the set top box 50". This description has nothing to do with the recitation "transmitting identification information of the identified transactions from the node to a charging information system of the connection provider". In the claimed invention, the individual transactions are identified *from data to be sent to a subscriber* at a node of a data transmission connection used by a connection provider. In contrast, paragraph [0037] of Chelehmal does not mention identifying transactions from data to be sent to the subscriber because the information discussed in paragraph [0037], lines 8-11 of Chelehmal is obtained from the request of the subscriber. Since Chelehmal fails to disclose identified transactions, Chelehmal also fails to disclose "transmitting identification information of the identified transactions from the node to a charging information system of the connection provider".

The Examiner also alleges that paragraph [0037], lines 8-11, of Chelehmal discloses the limitation "identifying in the charging information system transactions in the chargeable service entity based on the identification information of the identified transactions" because the Examiner reads that section of Chelehmal as teaching that each movie or data purchased by the subscriber is identified within the managed IP network. As pointed out above, Chelehmal discloses that the indication of charges to be billed is based on a request made by a subscriber and has nothing to do with identifying individual transactions in a chargeable service entity. Since Chelehmal obtains the charging information based only on the subscriber's request and not from data to be sent to the subscriber, there is no reason to identify transactions in a chargeable entity.

The Examiner acknowledges that Chelehmal fails to disclose the steps of "generating in the charging information system one content ticket for the chargeable service entity using the transactions in the chargeable service entity" and "using the content ticket in billing for the chargeable service entity, whereby a subscriber associated with the subscriber terminal is billed only once for the accumulated charges of all of the transactions in the chargeable service entity", and cites Matsuzaki for that omission.

Matsuzaki, however, fails to teach or suggest what Chelehmal lacks. As explained below in more detail, Matsuzaki discloses time-based billing in a broadcasting environment. Matsuzaki relates to a system for scrambling pay information to prevent the original pay information from being recovered unless certain information is known, the system having transmitting stations TS and receiving stations RS. Receiving station RS includes a server 2 and a plurality of terminals 3. The pay information is display, audio output, or data processing (see col. 13, lines 23-24 of Matsuzaki). The receiving station which receives the pay information calculates a charge for using the pay information at each terminal from the use situations (see col. 13, lines 27-

30). More specifically, the server 2 of the receiving station calculates a charge for use in response to a degree of use of the pay information (see col. 13, lines 58-60). Thus, Matsuzaki discloses a time-based billing scheme and fails to disclose the steps of "transmitting identification information of the identified transactions from the node to a charging information system of the connection provider", "identifying in the charging information system transactions in a chargeable service entity based on the identification information of the identified transactions", "generating in the charging information system one content ticket for the chargeable service entity using the transactions in the chargeable service entity", and "using the content ticket in billing for the chargeable service entity, whereby a subscriber associated with the subscriber terminal is billed only once for the accumulated charges of all the transactions in the chargeable service entity", as expressly recited in independent claim 1.

In view of these remarks, independent claim 1 is not obvious over the combined teachings of Chelehmal and Matsuzaki.

Independent claim 29 includes similar limitations to claim 1 and should therefore be deemed allowable for the same reasons.

For the foregoing reasons, it is respectfully submitted that the combined teachings of Chelehmal and Matsuzaki fail to establish a *prima facie* case of obviousness with regard to the subject matter recited in claims 1 and 29. The Final Rejection of independent claims 1 and 29 should be reversed.

Dependent claims 6-10, 12-14, 22-23, 34-38, 40-42, and 50-51 are allowable for the same reasons as are independent claims 1 and 29, as well as for the additional recitations contained therein.

2.-11. Rejection of the remainder of the claims

The rejections of dependent claims 2-5, 11, 15-21, 24-33, 39, and 43-49 cite various secondary references. The secondary references -- i.e. U.S. Patent Application Publication No. 2002/0049841 (Johnson), U.S. Patent No. 7,069,234 (Cornelius), U.S. Patent No. 6,973,499 (Peden), U.S. Patent No. 7,082,466 (Steegmans), U.S. Patent No. 6,249,869 (Drupsteen), U.S. Patent No. 6,532,493 (Aviani), U.S. Patent No. 6,189,146 (Misra), U.S. Patent Application Publication No. 2002/0055847 (Nakano), U.S. Patent No. 5,944,824 (He), and U.S. Patent No. 6,226,498 (Tschorn) -- each fail to teach what Chelehmal and Matsuzaki lack.

Accordingly, claims 1-56 are also allowable over the combined teachings of Chelehmal, Matsuzaki and the above-listed secondary references.

CONCLUSION

For the foregoing reasons, it is respectfully submitted that appellants' claims are not rendered obvious by and are, therefore, patentable over the art of record, and the Examiner's rejections should be reversed.

Respectfully submitted,
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Dated: October 22, 2008

CLAIMS APPENDIX

1. (previously presented) A method of generating charging data in a data network, comprising:

transmitting data generated by a content provider in a content server to a node of a data transmission connection used by a connection provider;

transmitting the data generated by the content provider from the node through the data transmission connection used by the connection provider to a subscriber terminal;

identifying in the node individual transactions in the data to be transmitted to the subscriber terminal;

transmitting identification information of the identified transactions from the node to a charging information system of the connection provider;

identifying in the charging information system transactions in a chargeable service entity based on the identification information of the identified transactions;

generating in the charging information system one content ticket for the chargeable service entity using the transactions in the chargeable service entity, and

using the content ticket in billing for the chargeable service entity, whereby a subscriber associated with the subscriber terminal is billed only once for the accumulated charges of all the transactions in the chargeable service entity.

2. (previously presented) The method as claimed in claim 1, wherein the data network is selected from a group comprising the Internet and a mobile system employing wireless application protocol (WAP).

3. (previously presented) The method of claim 1, further comprising generating transaction-specific tickets on the basis of the individual transactions by the connection provider.

4. (previously presented) The method of claim 1, wherein the charging information system is a WAP charging gateway.

5. (previously presented) The method of claim 1, further comprising generating, by the connection provider, the content ticket on the basis of ~~the~~ transaction tickets generated on the basis of the individual transactions.

6. (previously presented) The method of claim 1, further comprising:

defining a content identifier identifying the chargeable service entity, and

transmitting to the connection provider the content identifier associated with the transactions of the chargeable service entity to be transmitted to the subscriber terminal.

7. (previously presented) The method of claim 1, wherein a content identifier is used to identify the transactions of the chargeable service entity.

8. (previously presented) The method of claim 1, further comprising generating the content ticket of the chargeable service entity by using a content identifier.

9. (previously presented) The method of claim 1, further comprising generating, by the content provider, a content identifier associated with the transactions of the chargeable service entity.

10. (previously presented) The method of claim 1, further comprising inserting a content identifier in header information of the transactions of the chargeable service entity.

11. (previously presented) The method of claim 1, further comprising inserting a content identifier in http header information of the transactions of the chargeable service entity.

12. (previously presented) The method of claim 1, further comprising transmitting a content identifier separate from the data of the transactions of the chargeable service entity.

13. (previously presented) The method of claim 1, further comprising defining a service platform identifier identifying a service platform of the content provider.

14. (previously presented) The method of claim 1, further comprising generating a service platform identifier by the content provider.

15. (previously presented) The method of claim 1, further comprising transmitting a service platform identifier to the connection provider, the service platform identifier associated with the transactions of the chargeable service entity to be transmitted to the subscriber terminal.

16. (previously presented) The method of claim 1, further comprising generating, by the connection provider, a service platform identifier associated with the transactions of the chargeable service entity to be transmitted to the subscriber terminal.

17. (previously presented) The method of claim 1, further comprising using a service platform identifier for identifying the transactions of the chargeable service entity.

18. (previously presented) The method of claim 1, further comprising using a service platform identifier for generating the content ticket of the chargeable service entity.

19. (previously presented) The method of claim 1, further comprising inserting a service platform identifier in header information of the transactions of the chargeable service entity.

20. (previously presented) The method of claim 1, further comprising inserting a service platform identifier in http header information of the transactions of the chargeable service entity.

21. (previously presented) The method of claim 1, further comprising transmitting a service platform identifier separate from the data of the transactions of the chargeable service entity.

22. (previously presented) The method of claim 1, wherein a numerical IP address of the content server is used to identify the transactions of the chargeable service entity.

23. (previously presented) The method of claim 1, wherein a numerical IP address of the content server is used in generating a service platform identifier.

24. (previously presented) The method of claim 1, wherein a URL address of the content server is used to identify the transactions of the chargeable service entity.

25. (previously presented) The method of claim 1, wherein a URL address of the content server is used in generating a service platform identifier.

26. (previously presented) The method of claim 1, further comprising attaching a user identifier to the content ticket.

27. (previously presented) The method of claim 1, wherein a user identifier attached to the content ticket is an international ISDN number of the subscriber associated with the subscriber terminal.

28. (previously presented) The method of claim 1, wherein a user identifier attached to the content ticket is an IP address identifying the subscriber terminal in the Internet network.

29. (previously presented) A data network comprising:

a content server of a content provider;

a node of a data transmission connection used by a connection provider, the content server being connected to the node through the Internet, the node being connected, by a connection through a data transmission connection used by the connection provider, to a subscriber terminal;

a charging information system connected to the node, the node comprises means for identifying individual transactions in data to be transmitted to the subscriber terminal;

means for identifying transactions of a chargeable service entity in the charging information system based on identification information of the individual transactions;

means for generating in the charging information system one content ticket for the chargeable service entity using the transactions in the changeable service entity, and

means for using the one content ticket in billing for the chargeable service entity, whereby a subscriber associated with the subscriber terminal is billed only once for the accumulated charges of all the transactions in the chargeable service entity.

30. (previously presented) The data network of claim 29, wherein the data network is selected from a group comprising the Internet and a mobile system employing a wireless application protocol (WAP).

31. (previously presented) The data network of claim 29, further comprising means, used by the connection provider, for generating transaction-specific tickets on the basis of the individual transactions.

32. (previously presented) The data network of claim 29, wherein the charging information system is a WAP charging gateway.

33. (previously presented) The data network of claim 29 further comprising means, used by the connection provider, for generating the content ticket on the basis of transaction tickets generated on the basis of the individual transactions.

34. (previously presented) The data network of claim 29, further comprising:

means for defining a content identifier identifying the chargeable service entity, and means for transmitting to the connection provider the content identifier associated with the transactions of the chargeable service entity to be transmitted to the subscriber terminal.

35. (previously presented) The data network of claim 29, further comprising means for using the content identifier to identify the transactions of the chargeable service entity.

36. (previously presented) The data network of claim 29, further comprising means for generating a content ticket for the chargeable service entity by using a content identifier.

37. (previously presented) The data network of claim 29, further comprising means, used by the content provider, for generating a content identifier associated with the individual transactions.

38. (previously presented) The data network of claim 29, further comprising means for inserting a content identifier in header information of the transactions of the chargeable service entity.

39. (previously presented) The data network of claim 29, further comprising means for inserting a content identifier in http header information of the transactions of the chargeable service entity.

40. (previously presented) The data network of claim 29, further comprising means for transmitting a content identifier identifying the chargeable service entity separate from the data of the transactions of the chargeable service entity.

41. (previously presented) The data network of claim 29, further comprising means for defining a service platform identifier identifying a service platform of the content provider.

42. (previously presented) The data network of claim 29, further comprising means, used by the content provider, for generating a service platform identifier.

43. (previously presented) The data network of claim 29, further comprising means for transmitting to the connection provider a service platform identifier associated with the transactions of the chargeable service entity to be transmitted to the subscriber terminal.

44. (previously presented) The data network of claim 29, further comprising means, used by the connection provider, for generating a service platform identifier associated with the transactions of the chargeable service entity to be transmitted to the subscriber terminal.

45. (previously presented) The data network of claim 29, further comprising means for using a service platform identifier for identifying the transactions of the chargeable service entity.

46. (previously presented) The data network of claim 29, further comprising means for using a service platform identifier for generating the content ticket of the chargeable service entity.

47. (previously presented) The data network of claim 29, further comprising means for inserting a service platform identifier in header information of the transactions of the chargeable service entity.

48. (previously presented) The data network of claim 29 further comprising means for inserting a service platform identifier in http header information of the transactions of the chargeable service entity.

49. (previously presented) The data network of claim 29, further comprising means for transmitting a service platform identifier separate from the data of the transactions of the chargeable service entity.

50. (previously presented) The data network of claim 29, further comprising means for using a numerical IP address of the content server to identify the transactions of the chargeable service entity.

51. (previously presented) The data network of claim 29, further comprising means for using a numerical IP address of the content server in generating a service platform identifier.

52. (previously presented) The data network of claim 29, further comprising means for using a URL address of the content server to identify the transactions of the chargeable service entity.

53. (previously presented) The data network of claim 29, further comprising means for using a URL address of the content server in generating a service platform identifier.

54. (previously presented) The data network of claim 29, further comprising means for attaching a user identifier to the content ticket.

55. (previously presented) The data network of claim 29, wherein a user identifier attached to the content ticket is the international ISDN number of the subscriber of the subscriber terminal (MSISDN).

56. (previously presented) The data network of claim 29, wherein a user identifier attached to the content ticket is in IP address identifying the subscriber terminal in the Internet network.

EVIDENCE APPENDIX

None.

RELATED PROCEEDINGS APPENDIX

None.